

## MAIN INSTALLATION CHECKLIST

Unless otherwise noted, all code references are to 49CFR Part 192.  
If an item is marked Unsatisfactory, Not Applicable, or Not Checked, an explanation must be included in this report.

<b>Operator: AMEREN ILLINOIS COMPANY</b>	Operator ID#: 32513
<b>Inspection Date(s): 11/1/2012 (Half)</b>	Man Days: 0.5
<b>Inspection Unit: Lincoln Storage</b>	
<b>Location of Audit: Lincoln</b>	
<b>Exit Meeting Contact: J.R. Jennings – Supervisor Northern Storage Fields</b>	
<b>Inspection Type: Design Testing and Construction</b>	
<b>Pipeline Safety Representative(s): Jim Watts</b>	
<b>Company Representative to Receive Report: Michael Fuller</b>	
<b>Company Representative's Email Address: mfuller2@ameren.com</b>	

CONSTRUCTION INFORMATION		
<b>Location of Construction:</b> Staff observed replacement of piping in the Lincoln Storage field at 700 Avenue and 1300 Street.	<b>Construction Performed By:</b> KS Energy Services	
<b>Contractor Foreman:</b>	Dave Stinnett	
<b>Operator Inspector:</b>	3rd Party Inspection - Harvey Schofield	
Person(s) On Job Site		
Terry Schutt - Welder	Lee Nelson - Laborer	John Higgenbotham - Operator
Julie Witt - Laborer	Marvin Plunk - Laborer	Harvey Schofield - 3rd Party Inspector
Dave Stinnett - Foreman		
<b>Description of Construction:</b> Staff observed two directional bores and pipe pull in performed while installing 2 road crossings at 700 Avenue and 1300 Street. The new piping being installed is replacing existing well and collection system piping.		

MAIN INSTALLATION		Status
192.55	Steel	Yes
192.59	PE	No
<b><u>General Comment:</u></b> <i>No pe piping was installed during the audit.</i>		
192.59	Other	No
<b><u>General Comment:</u></b>		

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*No other types of piping were installed during the audit.*

192.5	Class location :	<b>Class One</b>
192.619,192.621,192.623	MAOP	<b>833</b>
192.63	Pipe Size :	<b>3 and 4 inch</b>
192.55,192.59	Specification :	<b>API 5L</b>
192.55,192.59	Manufacturer :	<b>MidStates</b>
192.55,192.59	Pipe Grade :	<b>X42/X52</b>
192.55,192.59	Wall Thickness :	<b>4 - .237 3 - .216</b>
192.63(a)(2)	Are pipe, valves, and fittings properly marked for identification?	<b>Satisfactory</b>

**General Comment:**

*New valves, pipe and flanges were observed marked as required.*

192.227	Date of Welder qualification:	<b>5/31/2012</b>
192.227	Welder's Name:	<b>Terry Schutt</b>
192.225,192.275,192.277,192.279,192.283	Is pipe joined in accordance with approved written procedures?	<b>Satisfactory</b>
192.285	Date of Plastic Joining Qualification :	<b>Not Applicable</b>

**General Comment:**

*No pe fusion was performed during the audit.*

192.285	Joiner's name:	<b>Not Applicable</b>
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**General Comment:**

*No pe joining was performed during the audit.*

192.455	Is buried metallic pipe coated?	<b>Satisfactory</b>
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**General Comment:**

*Steel pipe was coated with Valspar Pipeclad 2000. The pipe print line indicated 15-17 mils thickness.*

192.461	Does coating meet 192.461?	<b>Satisfactory</b>
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**General Comment:**

*Valspar epoxy coating.*

192.455(a)(1)	Is cathodic protection being provided?	<b>Satisfactory</b>
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**General Comment:**

*Piping will be cathodically protected using rectifiers upon completion of the piping installation.*

192.455(a)(1)	Is cathodic protection being provided? By Anodes:	<b>No</b>
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**General Comment:**

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<i>No anodes are used for cathodic protection.</i>		
192.455(a)(1)	Is cathodic protection being provided? By Rectifier:	<b>Yes</b>
<b><u>General Comment:</u></b> <i>All piping in the storage field is protected using rectifiers.</i>		
192.461(c)	Is coating inspected just prior to being installed in the ditch?	<b>Satisfactory</b>
<b><u>General Comment:</u></b> <i>The 3rd party inspector with Ameren performed pipe inspections as the piping was pulled in to the bore opening. The piping was also jeeped for damage prior to performing the bore. The jeeping was not observed as part of the inspection.</i>		
192.467	Are pipelines electrically isolated from other underground metallic structures?	<b>Satisfactory</b>
<b><u>General Comment:</u></b> <i>Storage field piping is isolated from the well piping using an insulated flange.</i>		
192.479	Are above ground facilities cleaned and coated or jacketed as needed?	<b>Not Applicable</b>
<b><u>General Comment:</u></b> <i>Above ground piping installations were not completed but will be painted after completing the installations to protect against atmospheric corrosion.</i>		
192.303	Are comprehensive written construction specifications available and adhered to?	<b>Satisfactory</b>
<b><u>General Comment:</u></b> <i>Ameren construction standards and O and M were present at the job site.</i>		
192.305	Are inspections performed by the operator to check adherence to the construction specifications?	<b>Satisfactory</b>
<b><u>General Comment:</u></b> <i>Ameren had a third party inspector on site to observe the piping installations.</i>		
192.307	Is material being visually inspected at the site of installation to ensure against damage that could impair its serviceability?	<b>Satisfactory</b>
<b><u>General Comment:</u></b> <i>Piping and materials were being inspected by the onsite inspector.</i>		
192.319	Is ditch back-filled to provide firm support and prevent damage to pipe or coating?	<b>Satisfactory</b>
192.321(c)	Is plastic pipe installed as to minimize shear and tensile forces?	<b>Not Applicable</b>
<b><u>General Comment:</u></b> <i>No pe piping was installed during the inspection.</i>		
192.321(e)	Does plastic pipe have means of locating while underground?	<b>Not Applicable</b>
<b><u>General Comment:</u></b>		

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<i>No pe piping was installed during the inspection.</i>		
192.325	Are required clearances from underground structures being maintained?	<b>Satisfactory</b>
192.327	Is required cover being obtained appropriate to type of pipeline and location?	<b>Satisfactory</b>
<b><u>General Comment:</u></b> <i>The pipe was installed with a minimum of 48 inches of cover.</i>		
192.503	Are general testing requirements being met?	<b>Not Checked</b>
<b><u>General Comment:</u></b> <i>No pressure testing was performed during the audit.</i>		
192.517	Are records being made of strength and leak tests?	<b>Not Checked</b>
<b><u>General Comment:</u></b> <i>No pressure tests were performed during the audit but are documented using pressure recording charts.</i>		
192.807	Were covered employees Operator Qualification records reviewed to ensure qualification?	<b>Satisfactory</b>
<b><u>General Comment:</u></b> <i>Staff reviewed the qualifications of the personnel on site who were performing covered tasks. The contractor employees were all qualified for the tasks being observed.</i>		
192.805(c)	Were non-qualified personnel being “directed and observed” by a qualified individual?	<b>Not Applicable</b>
<b><u>General Comment:</u></b> <i>No non-qualified personnel were present at the job site.</i>		
192.805(c)	Were span of control limitations being followed?	<b>Not Applicable</b>
<b><u>General Comment:</u></b> <i>There were no non-qualified personnel at the job site. All personnel were qualified for the tasks performed.</i>		
Was a Protocol 9 (Form 15) Completed?		<b>Yes</b>
192.614	Were One Call Notifications performed as required?	<b>Satisfactory</b>
192.614	Dig Ticket #	<b>Not Applicable</b>
<b><u>General Comment:</u></b> <i>The contractor is responsible for calling in notices of excavation and was excavating with current JULIE dig notices.</i>		

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